

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE J		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0002		3. EFFECTIVE DATE 21 July 2003		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY U.S. ARMY ENGINEER DISTRICT, ALBUQUERQUE CORPS OF ENGINEERS 4101 JEFFERSON PLAZA, N.E. ALBUQUERQUE, NEW MEXICO 87109-3435		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(✓) 9A. AMENDMENT OF SOLICITATION NO. DACA47-03-R-0030		9B. DATED (SEE ITEM 11) 26 June 2003	
				(X)		10A. MODIFICATION OF CONTRACTS/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					

### 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

### 12. ACCOUNTING AND APPROPRIATION DATA (If required)

### 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

- (✓) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
- B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
- C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
- D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor ☐ is not, ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

### 14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

PROJECT: DESIGN/BUILD VISITING QUARTERS, KIRTLAND AIR FORCE BASE, NEW MEXICO

1. This is Amendment No. 2 to Solicitation No. DACA47-03-R-0030; 26 June 2003. The following revisions shall be incorporated into the specifications and drawings. All other provisions shall remain unchanged.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR		16B. UNITED STATES OF AMERICA	
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	
15C. DATE SIGNED		16C. DATE SIGNED	

2. SECTION 00100, INSTRUCTIONS TO BIDDERS:

a. On page 11 of 173, clause 52.228-1, BID GUARANTEE, paragraph (c). Change paragraph (c) to read as follows: "(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3,000,000, whichever is less."

b. On page 14 of 174, clause FUNDS AVAILABLE, in the first sentence change \$7,700,000.00" to "\$7,500,000.00".

3. SPECIFICATIONS: Delete the following listed pages and substitute the pages attached hereto. On the revised pages, for convenience, changes are emphasized by the amendment number in parentheses before and after changes from the previous issue. All portions of the revised (or new) pages shall apply whether or not changes have been indicated.

<u>Delete Page</u>	<u>Insert Page</u>
<u>Volume 1 of 3</u>	
Proposal Schedule, Pages 3a thru 3b of 173 00800-2 01010-44 01010-104	Proposal Schedule, Pages 3a thru 3c of 173 00800-2 thru 00800-2a 01010-44 01010-104 thru 01010-104a
<u>Volume 3 of 3</u>	
-- Appendix O, Sheet Index --	Appendix G, Lab Reports (100 pages) Appendix O, Sheet Index Appendix I, Sheet 11

/////////LAST ITEM/////////

PROPOSAL SCHEDULE (Cont'd)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
<u>OPTION NO. 1</u>					
0006	Ninety-six (96) Refrigerators and Three (3) Ice makers, Complete	Job	Sum	***	\$ _____
TOTAL AMOUNT - OPTION NO. 1					\$ _____
<u>OPTION NO. 2</u>					
0007	One (1) Additional Passenger Elevator, Complete	Job	Sum	***	\$ _____
0008	Final As-Built Drawings	Job	Sum	***	\$ 2,000.00
0009	Operation and Maintenance Manuals	Job	Sum	***	\$ 2,000.00
TOTAL AMOUNT - OPTION NO. 2					\$ _____
<u>OPTION NO. 3</u>					
0010	Eight (8) Washers and Eight (8) Dryers, Complete	Job	Sum	***	\$ _____
TOTAL AMOUNT - OPTION NO. 3					\$ _____

## PROPOSAL SCHEDULE (Cont'd)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
<u>OPTION NO. 4</u>					
0011	Commercial Telephone System Service Entrance, Government Telephone System Service Entrance, and LAN Cable, and All Associated Site Work, Complete	Job	Sum	***	\$ _____
0012	Final As-Built Drawings	Job	Sum	***	\$ <u>2,000.00</u>
TOTAL AMOUNT - OPTION NO. 4					\$ _____

RECAPITULATION

1.	TOTAL AMOUNT - BASE BID	\$ _____
2.	TOTAL AMOUNT - BASE BID AND OPTIONS NO. 1, 2, 3, AND 4	\$ _____

## NOTES:

1. Award of all Proposal Items will be made to one proposer. Award of Base Bid and Options (if awarded) will be made to one proposer. Proposers must bid on all items. (2)

2. PROGRESS PAYMENT REQUESTS made by the Contractor pursuant to the provisions of Contract Clause, PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS, shall be submitted on ENG FORM 93 to the billing office as designated on Block 26, Standard Form 1442, Solicitation, Offer and Award, back. ENG FORM 93 shall be submitted to that office on the 1st of each month in appropriate form and certified. Photocopies of the form shall be furnished on that same date to the Corps of Engineers offices designated at the Pre-Construction Conference.

3 EXERCISE OF OPTIONS. The Government reserves the right to exercise the option(s) by written notice to the Contractor either singularly or in any combination for up to 90 calendar days after award of the Base Bid without an increase in the Offeror's bid price. Completion of added options shall continue at the same schedule as the Base Bid unless otherwise noted in the SPECIAL CLAUSES, Paragraph 1, COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK.



PROPOSAL SCHEDULE (Cont'd)

NOTES: (Cont'd)

4. EVALUATION OF OPTIONS: (FAR 52.217-5) (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirements. Evaluation of options will not obligate the Government to exercise the options(s).

SCHEDULE (Cont'd)

Item of Work	Commencement Time	Completion Time in Calendar Days After Receipt of Notice to Proceed	Liquidated Damages Per Calendar Day
<u>OPTION NO. 2</u>			
1.6 One (1) Additional Passenger Elevator, Complete	(If Option No. 2 is awarded, no additional time will be provided; the work shall be accomplished within the time period specified in the applicable sequence of work for the Base Bid requirement.)		
1.7 Final As-Built Drawings	(See Note 3)	-	-
1.8 Operation and Maintenance (O & M) Manuals	(See Note 4)	-	-

OPTION NO. 3

1.9 Eight (8) Washers and Eight (8) Dryers, Complete	(If Option No. 3 is awarded, no additional time will be provided; the work shall be accomplished within the time period specified in the applicable sequence of work for the Base Bid requirement.)		
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(2)

OPTION NO. 4

1.10 Commercial Telephone System Service Entrance, Government Telephone System Service Entrance, and LAN Cable, and All Associated Site Work, Complete	(If Option No. 4 is awarded, no additional time will be provided; the work shall be accomplished within the time period specified in the applicable sequence of work for the Base Bid requirement.)		
1.11 Final As-Built Drawings	(See Note 3)	-	-

(2)

\*Refer to Section, Environmental Protection, paragraph, Burrowing Owls, for coordination of clearing and grubbing and ground preparation activities time periods.

NOTES:

1. The completion time includes 30 calendar days for Government review of the 60% and 100% design submittal and 15 calendar days for the corrected final design submittal review. Written acknowledgement and verification of conformance to the RFP of the corrected final by the Government for each design phase or sub-phase of the work and receipt of associated construction

documents shall constitute Notice to proceed with construction for the equivalent phase or sub-phase of the project.

2. Landscaping. The planting season for trees, shrubs, and vines shall be from 1 October to 30 April; planting shall be accomplished during the planting season, or portion thereof (but not less than 15 days), following substantial completion of building construction. Maintenance and replacement of trees, shrubs, and vines shall commence immediately after each plant is planted, mulched, and staked and shall continue for a period of 120 calendar days after all plants are planted, mulched, and staked.

6.4.2.2 All grid lines shall be labeled for the element that they locate on the foundation and framing plans.

6.4.2.3 **Scale of Sections and Details.** All foundation sections and details shall be drawn at a minimum scale of  $3/4" = 1'-0"$ . All roof sections and details shall be drawn at a minimum scale of  $1\frac{1}{2}" = 1'-0"$ . The reason for these scale requirements is so the sections and details can be read when the drawings are reduced by one-half.

6.4.3 **CESPA Standard Structural Drawing Sheets.** The design drawings shall contain structural notes and typical details. These notes and details shall contain a list of the design loading criteria, a list of the strengths of the engineering materials used, the soil design values, and any other data that would be pertinent to remodeling and/or future additions. Reference CESPA Standard Structural Drawing Sheets S1, S2, S3, S4, and S5 for required minimum standard structural notes and typical details. These five sheets shall be placed as the first five sheets of the contract drawings no matter the size of the drawing sheets. There are two sets of Sheets S1, S2, S3, S4, and S5, one for reinforced ribbed mat slabs (RRMS) and one for "Floating Slabs" foundation systems as noted on the respective drawings. Standard sheets RM1, RM2 & RM3 are for RRMS foundation systems for use on layout of the ribs (sheet RM1) and typical foundation details (sheet RM2 and RM3). Standard sheets labeled with the prefix "HC" are required standard connection details of precast/prestressed concrete hollow core planks to reinforced CMU structural walls. CESPA Standard Structural Drawings Sheet RM4 contains typical details for Turned-Down-Edge footing system. For electronic copies of these standard structural drawings go to web site <http://www.spa.usace.army.mil/ec/cadd/index.htm>, click on "Discipline Specific Requirements" and click on "Structural". The contact for these drawings is Mr. Mike Mitchell with the CESPA COE at 505-342-3409, Fax 505-342-3497 or email at [Michael.e.Mitchell@usace.army.mil](mailto:Michael.e.Mitchell@usace.army.mil). These standard drawings are in MicroStation format. The minimum requirements for the respective notes are described in detail throughout this CESPA structural criteria document.

6.4.4 **One Time Referencing.** Specify elements of the structural drawings and specifications only one time within the contract documents (between the respective drawings sheets and between the drawings and the specifications). Excessive referencing of structural elements is a good source for modifications to the contract documents. Keyed notes help to specify items only one time on any respective drawing sheet. A few mandatory examples are as follows.

6.4.4.1 **Slabs on Ground.** Only specify the slab thickness and reinforcing on General Notes on the foundation plan sheet(s). Do not specify the slab information numerous times on the foundation plans and foundation details.

6.4.4.2 **Footing Elevations.** Footing elevations shall be specified only once in the general notes on the foundation plan sheet(s) and on the foundation plan(s) for any footing elevations that may be different from the general note specified elevations.

6.4.4.3 **Foundation Plan Sheet(s) General Notes.** The foundation plan sheet(s) shall contain as a minimum the following general notes.

Note: This raceway system is intended to provide pathways for the cables required below and for future (by others) relocations of comm. switches into the VQ building.

(2) 8.2.5.3 **OPTION 4.** The following cables shall be provided as Option No. 4.

8.2.5.3.1 **Commercial Telephone System Service Entrance.** Using the above conduit/raceway system, provide a communications cable(s) (probably 400 pr.) as required by PROTEL, from the telephone backboard in the VQ communication room, to the service connection point required by PROTEL (probably the comm. room in building 22010). The POC for PROTEL is/are Terry Kimbrough or Joe Spencer @ (940) 766-5566.

8.2.5.3.2 **Government Telephone System Service Entrance.** Using the above conduit/raceway system, provide a 50 twisted pair cable (#24 AWG copper, PE-89 type telephone cable, rated for CAT-3 service, with an outer jacket overall and rated for exterior and wet location duty), from the telephone backboard in the communication room in the VQ building to the point in Building 22010 where the existing exterior telephone cable come into that building. In the communication room in the VQ, terminate the 50 pr. cable on gas-protector 188 blocks, at the other end leave 30 feet of cable coiled up and left for termination by others. The POC for the KAFB Comm. Squad. is Matthew Baugh @ (505) 853-7426.

8.2.5.3.3 **LAN Cable.** Using the above conduit/raceway system, provide one 12 strand, single-mode (10 microns) loose tube, type PE-90 fiber optic cable, from the communication room in the VOQ to the point in the rear of Building 22000 (the Off. Club) where the existing exterior FO cables come into that building (a storage/communications room). Terminate both ends of the FO cable on LTUs. In the VOQ locate the LTUs in the LAN rack required below. In building 22000, locate the LTUs as necessary (wall mounted or in a rack if available. Install pull wires in vacant inner ducts.

8.2.5.4 Not Used.

(2)

8.2.5.5 **Other Communication Cables in Area.** There are existing communications cables in the construction site area of the VQ Building. For descriptions and locations of those cables, see the Communications Dwg in the attached. Any communications cables which are affected by the construction of the VQ building shall be repaired or relocated, as necessary, by the contractor as part of this project. All repairs or relocations shall be with replacements "in kind". Note: Existing cables may not remain in place under the foundation of the new building. All existing cables in locations under the new building footprint must be relocated. For general communication cable coordination, the POC for the KAFB Comm. Squad. is Matthew Baugh @ (505) 853-7426.

8.2.5.6 **CATV System Service Entrance.** The Contractor shall contact the CATV provider for the KAFB area and shall be responsible for installation of a CATV service to the new dorm building. The exterior cabling and CATV service to existing and the new buildings in this work shall be per the CATV company's standards, specifications, and requirements. Any costs or

reimbursements required by the CATV companies to provide CATV service to the existing and new buildings shall be the responsibility of the Contractor and shall be considered to be part of this contract. The CATV service to this project shall be consistent with and appropriate for providing the CATV services. Contractor shall contact and coordinate with PROTEL and the cable company through the Contracting Officer prior to any demolition of the building to determine whether they would like to salvage any equipment.

**8.2.6 Miscellaneous.**

**8.2.6.1 Road Crossings.** It shall be the responsibility of the Contractor to provide proper coordination and obtain all necessary permits, approvals, etc., before installing the crossings. All road crossings of existing roads shall be done with boring; Contractor shall provide steel casing sleeve for electrical utility concrete.

June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 1 @ 2 1/2

SAMPLE: Silty Clay (CL)

**ATTERBERG LIMITS (ASTM D-4318)**

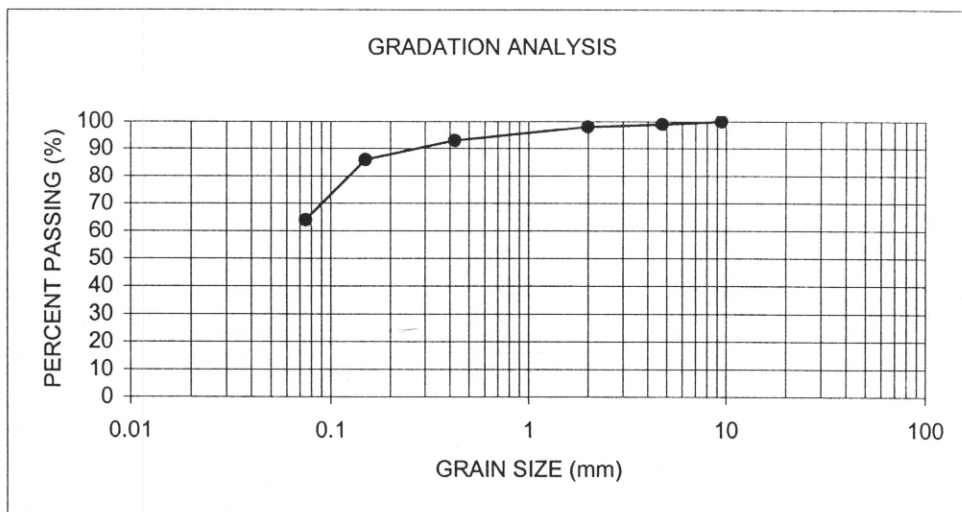
Liquid Limit 23  
Plasticity Index: 9

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
------------	-----------------

1.5"	
1"	
3/4"	
1/2"	
3/8"	100
No. 4	99
No. 10	98
No. 40	93
No. 100	86
No. 200	63.9

Moisture Content (%): 11.1



Respectfully Submitted:  
GEO-TEST, INC.

*[Signature]*  
Tim Byres, SET

Addressee: (2)

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2805-A LAS VEGAS CT.  
LAS CRUCES  
NEW MEXICO  
88007  
(505) 526-6260  
FAX (505) 523-1660



June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visting Officer Quarters- Kirkland AFB  
SAMPLE LOCATION: 1 @ 5'  
SAMPLE: Silty clay (CL)

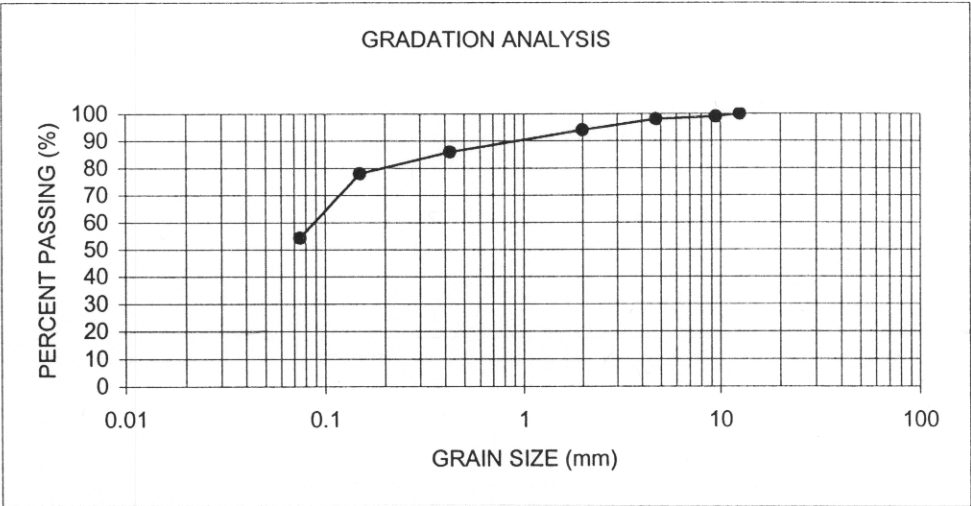
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 28  
Plasticity Index: 15

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	100
3/8"	99
No. 4	98
No. 10	94
No. 40	86
No. 100	78
No. 200	54.3

Moisture Content (%): 9.2



Respectfully Submitted:  
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Jim Byres, SET

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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 1 @ 7 1/2'  
SAMPLE: Silty Clay (CL)

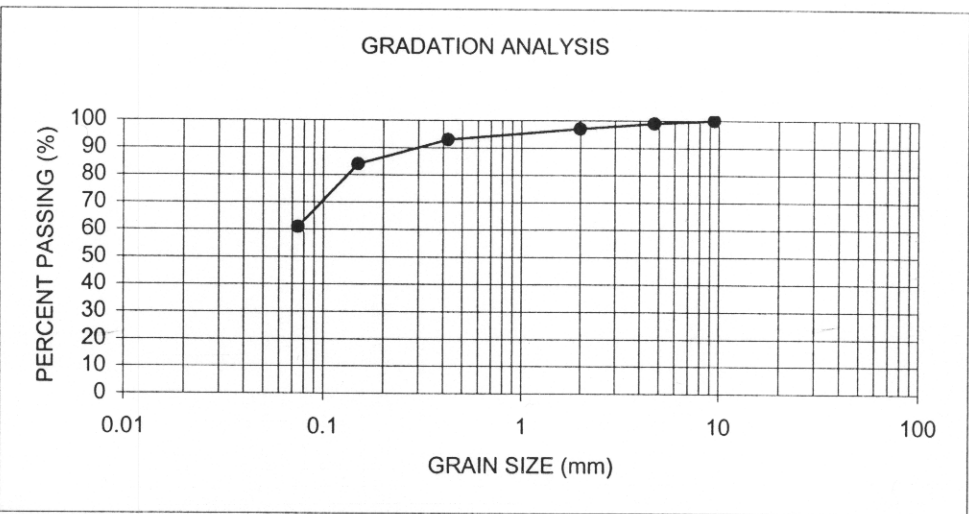
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	
3/8"	100
No. 4	99
No. 10	97
No. 40	93
No. 100	84
No. 200	60.9

Moisture Content (%): 9.7



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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters- Kirkland AFB

SAMPLE LOCATION: 1 @ 10'

SAMPLE: Silty Clay (CL)

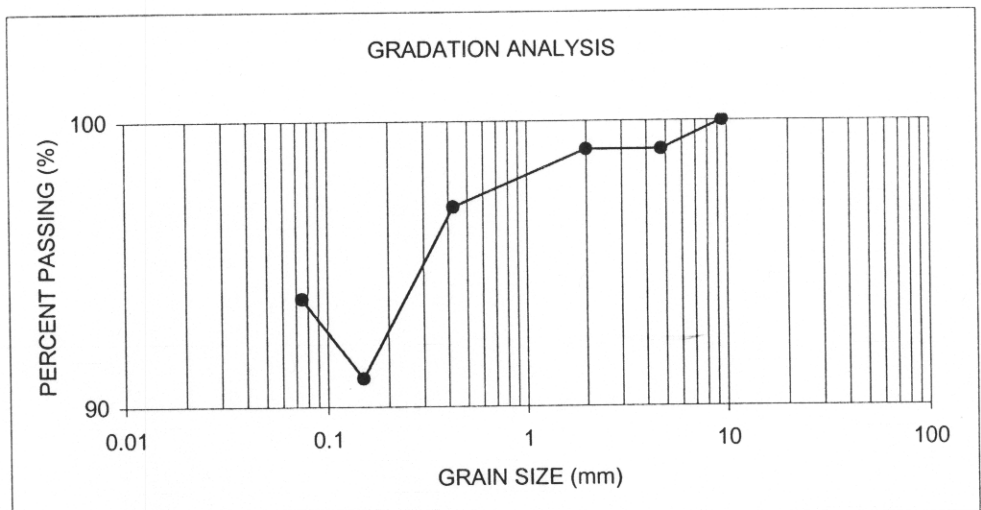
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 22  
Plasticity Index: 5

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	
3/8"	100
No. 4	99
No. 10	99
No. 40	97
No. 100	91
No. 200	73.8

Moisture Content (%): 11.5



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July 7, 2003



Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 1 @ 12 1/2'

SAMPLE: Silty Sand (SM)

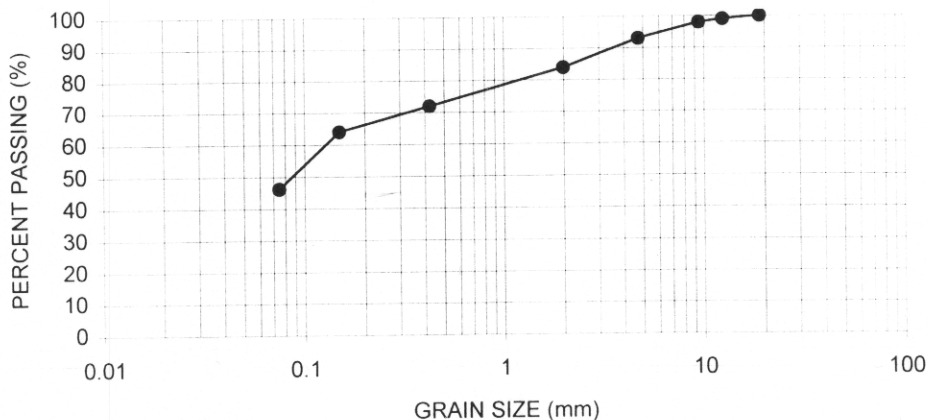
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	99
3/8"	98
No. 4	93
No. 10	84
No. 40	72
No. 100	64
No. 200	46.2
Moisture Content (%):	7.7

**GRADATION ANALYSIS**



Respectfully Submitted:  
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July 7, 2003



Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 1 @ 15'  
SAMPLE: Silty Sand (SM)

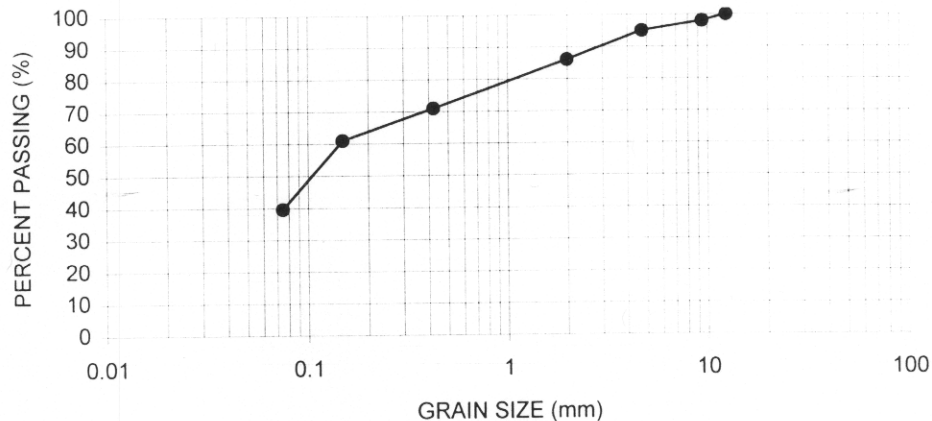
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP


**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	100
3/8"	98
No. 4	95
No. 10	86
No. 40	71
No. 100	61
No. 200	39.6
Moisture Content (%):	6.8

**GRADATION ANALYSIS**



Respectfully Submitted:  
GEO-TEST, INC.

  
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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarter, Kirkland AFB

SAMPLE LOCATION: 1 @ 17 1/2 '

SAMPLE: Silty Sand (SM)

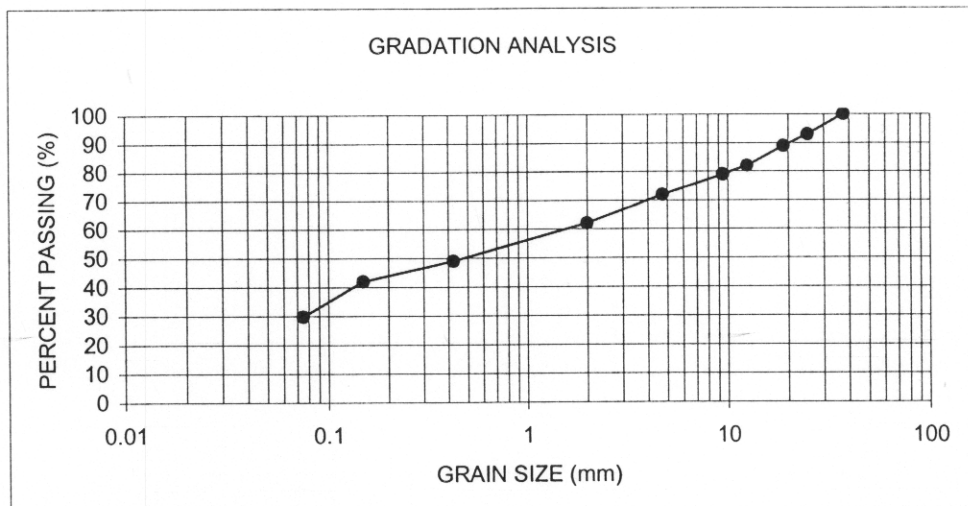
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	100
1"	93
3/4"	89
1/2"	82
3/8"	79
No. 4	72
No. 10	62
No. 40	49
No. 100	42
No. 200	29.8

Moisture Content (%): 6.8



Respectfully Submitted:  
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July 7, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters Kirkland AFB  
SAMPLE LOCATION: 1 @ 20 '  
SAMPLE: Clayey Sand (SC)

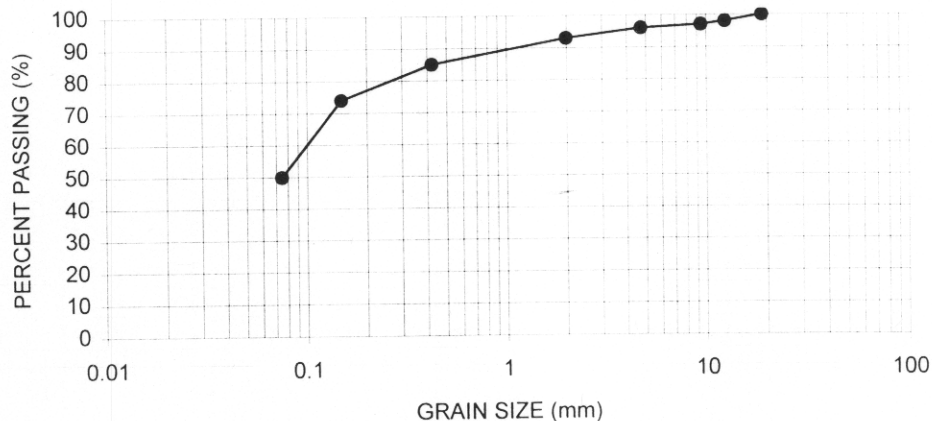
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit 22  
Plasticity Index: 10


SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	98
3/8"	97
No. 4	96
No. 10	93
No. 40	85
No. 100	74
No. 200	49.9
Moisture Content (%):	6.9

GRADATION ANALYSIS



Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

Addressee: (2)

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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 1 @ 22 1/2 '  
SAMPLE: Silt (ML)

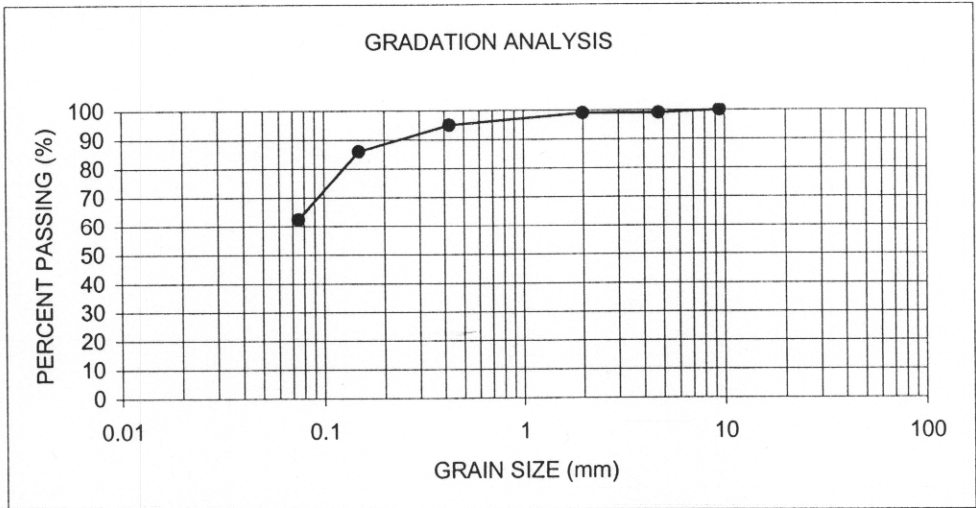
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	
3/8"	100
No. 4	99
No. 10	99
No. 40	95
No. 100	86
No. 200	62.5

Moisture Content (%):



Respectfully Submitted:  
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June 24, 2003

**GEO-TEST**

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters Kirkland AFB

SAMPLE LOCATION: 1 @ 27 1/2 '

SAMPLE: Slightly silty sand (SM-SP)

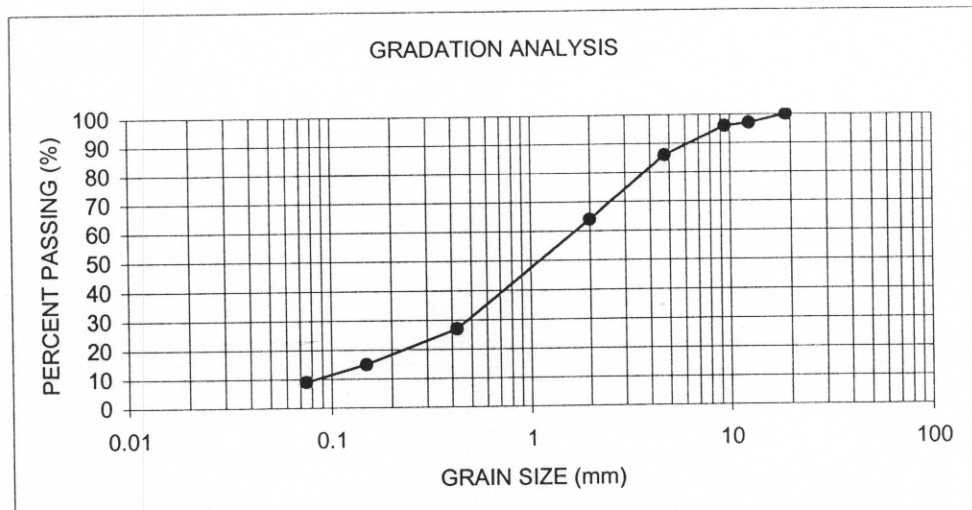
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	97
3/8"	96
No. 4	86
No. 10	64
No. 40	27
No. 100	15
No. 200	9

Moisture Content (%): 2.5



Respectfully Submitted:  
GEO-TEST, INC.

*[Signature]*  
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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 1 @ 30'  
SAMPLE: Clayey Sand (SC)

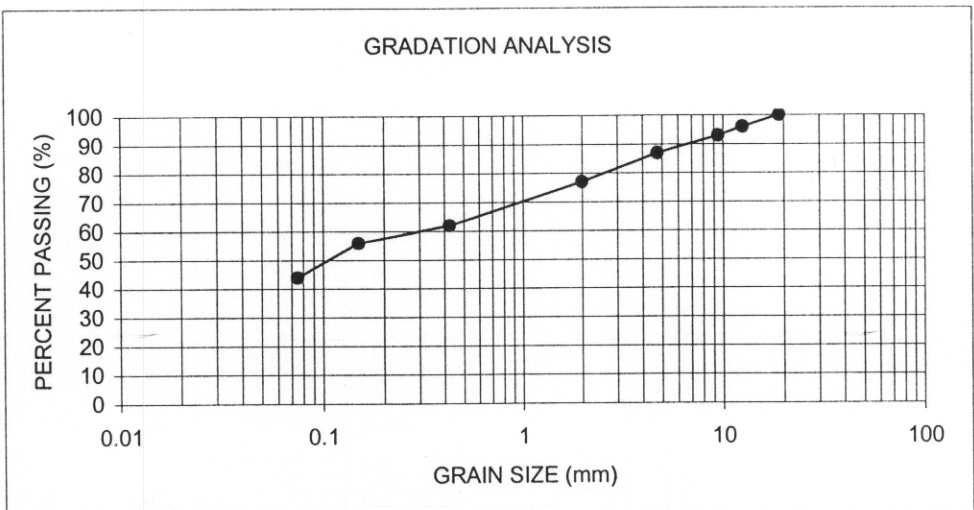
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 23  
Plasticity Index: 10

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	96
3/8"	93
No. 4	87
No. 10	77
No. 40	62
No. 100	56
No. 200	43.9

Moisture Content (%): 7.8



Respectfully Submitted:  
GEO-TEST, INC.

  
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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 2 @ 2 1/2'  
SAMPLE: Clayey Sand (SC)

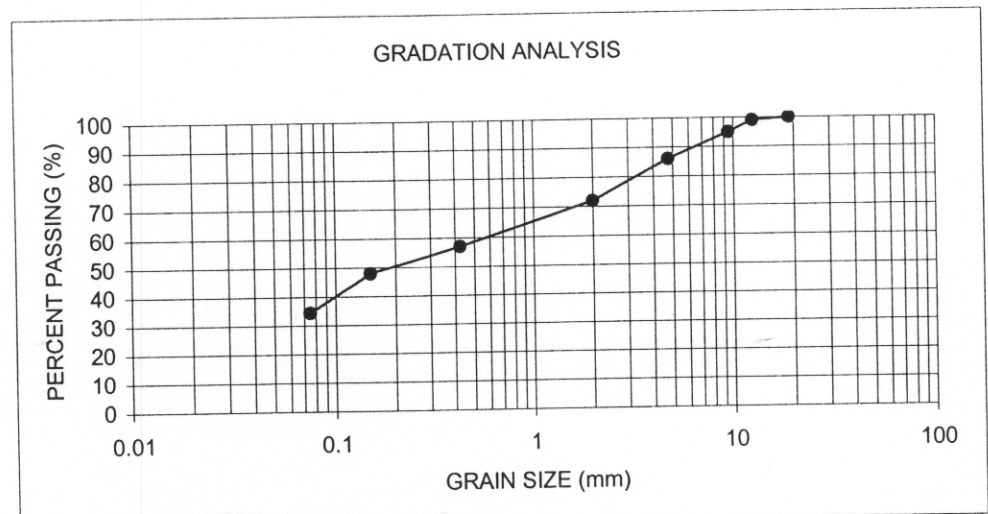
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 34  
Plasticity Index: 18

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	99
3/8"	95
No. 4	86
No. 10	72
No. 40	57
No. 100	48
No. 200	34.5

Moisture Content (%): 5.5



Respectfully Submitted:  
GEO-TEST, INC.

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July 7, 2003



Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 2 @ 5'

SAMPLE: Silty Gravelly Sand (SM)

**ATTERBERG LIMITS (ASTM D-4318)**

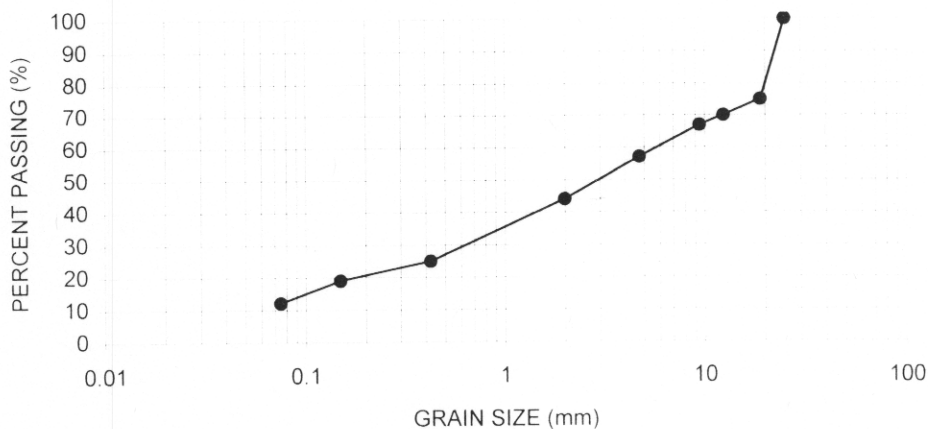
Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	100
3/4"	75
1/2"	70
3/8"	67
No. 4	57
No. 10	44
No. 40	25
No. 100	19
No. 200	12.2

Moisture Content (%): 1.1

**GRADATION ANALYSIS**



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Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

Addressee: (2)

July 7, 2003



Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 2 @ 7 1/2'

SAMPLE: Slightly Silty Sand (SM-SP)

**ATTERBERG LIMITS (ASTM D-4318)**

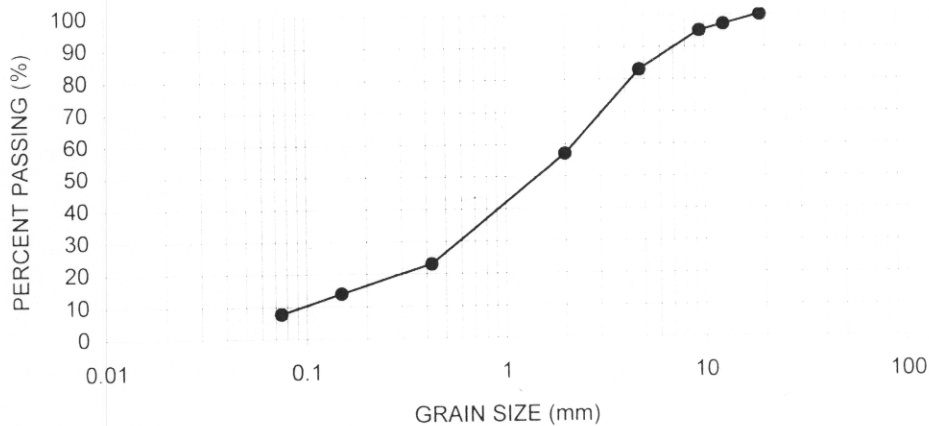
Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	97
3/8"	95
No. 4	83
No. 10	57
No. 40	23
No. 100	14
No. 200	7.8

Moisture Content (%): 1.5

**GRADATION ANALYSIS**

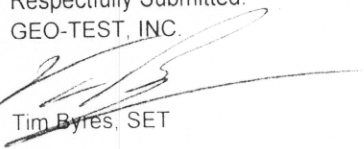


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Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

Addressee: (2)

July 7, 2003

**GEO-TEST**

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 2 @ 10'

SAMPLE: Slightly Silty Sand (SM-SP)

**ATTERBERG LIMITS (ASTM D-4318)**

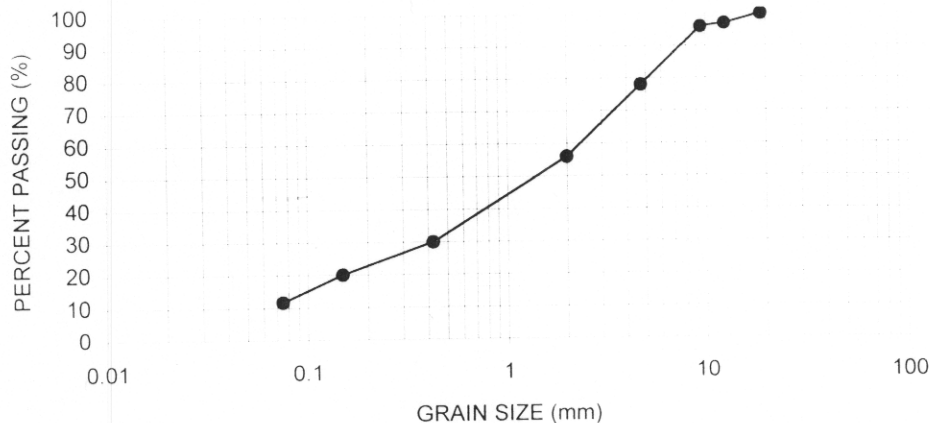
Liquid Limit 19  
Plasticity Index: 2

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	97
3/8"	96
No. 4	78
No. 10	56
No. 40	30
No. 100	20
No. 200	11.7

Moisture Content (%): 1.9

**GRADATION ANALYSIS**



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Respectfully Submitted:  
GEO-TEST, INC.

*[Signature]*  
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Addressee: (2)

June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters  
SAMPLE LOCATION: 2 @ 12 1/2'  
SAMPLE: Slightly Silty Sand (SM-SP)

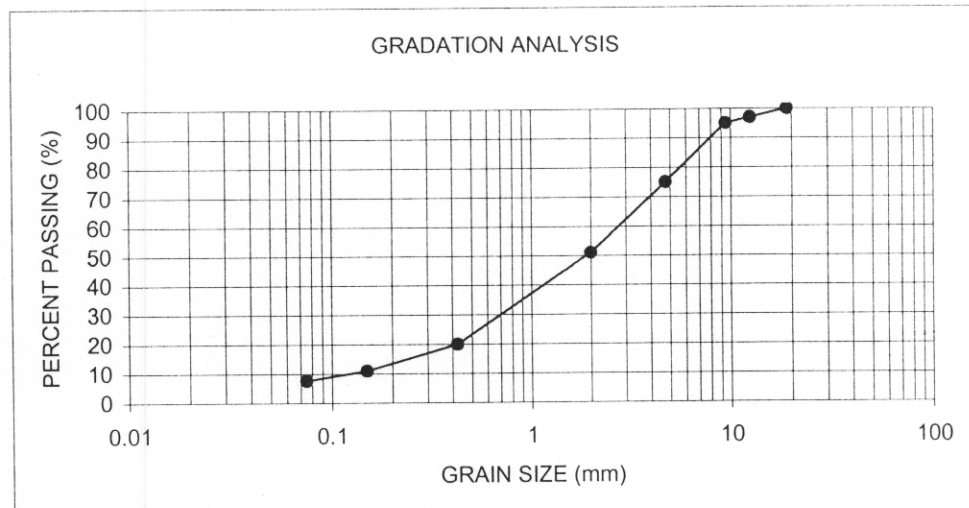
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	97
3/8"	95
No. 4	75
No. 10	51
No. 40	20
No. 100	11
No. 200	7.6

Moisture Content (%): 1.2



Respectfully Submitted:  
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Tim Byres, SET

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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 2 @ 15'  
SAMPLE: Slightly Silty Sand (SM-SP)

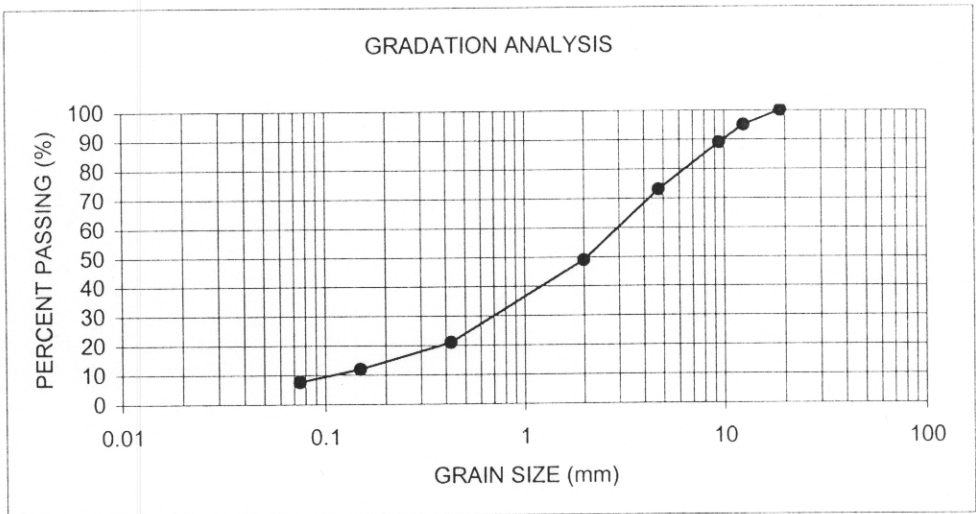
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	95
3/8"	89
No. 4	73
No. 10	49
No. 40	21
No. 100	12
No. 200	7.6

Moisture Content (%): 1.1



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Respectfully Submitted:  
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Addressee: (2)





June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 2 @ 17 1/2'  
SAMPLE: Silty sand with clay (SM-SC)

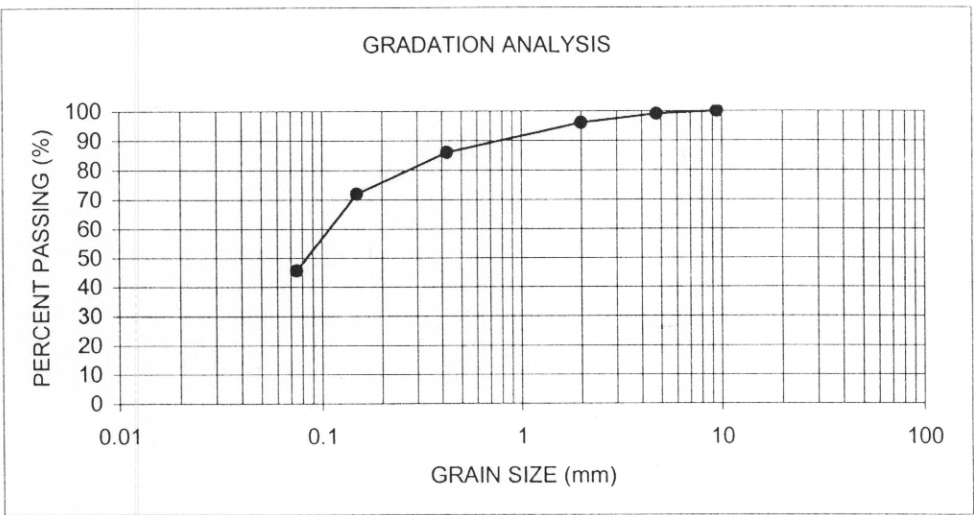
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 22  
Plasticity Index: 6

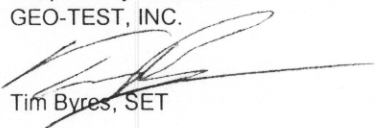
**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	
3/8"	100
No. 4	99
No. 10	96
No. 40	86
No. 100	72
No. 200	45.6

Moisture Content (%): 4.8



Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 2 @ 20'  
SAMPLE: Silty Clay (CL)

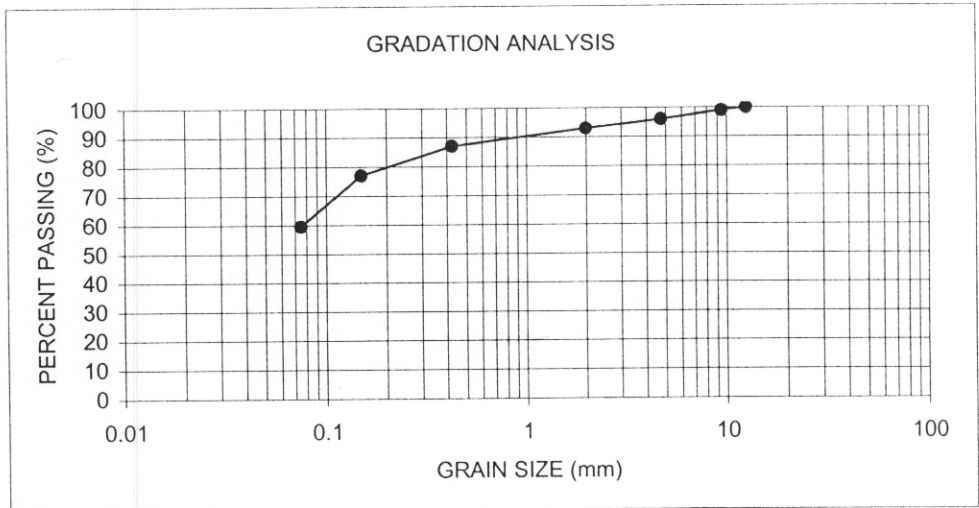
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 29  
Plasticity Index: 16


**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	100
3/8"	99
No. 4	96
No. 10	93
No. 40	87
No. 100	77
No. 200	59.5

Moisture Content (%): 9.2



Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

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June 24, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
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Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 2 @ 22 1/2'  
SAMPLE: Silty Clay (CL)

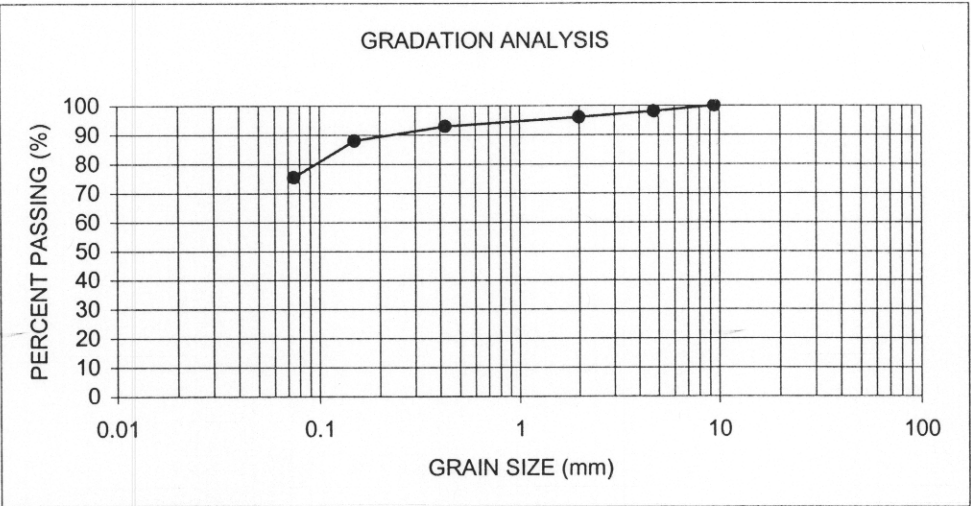
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 26  
Plasticity Index: 15

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	
3/8"	100
No. 4	98
No. 10	96
No. 40	93
No. 100	88
No. 200	75.5

Moisture Content (%): 13.0



Respectfully Submitted:  
GEO-TEST, INC.

Tim Byres, SET

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June 24, 2003

**GEO-TEST**

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 2 @ 25'

SAMPLE: Silty Sand (SM)

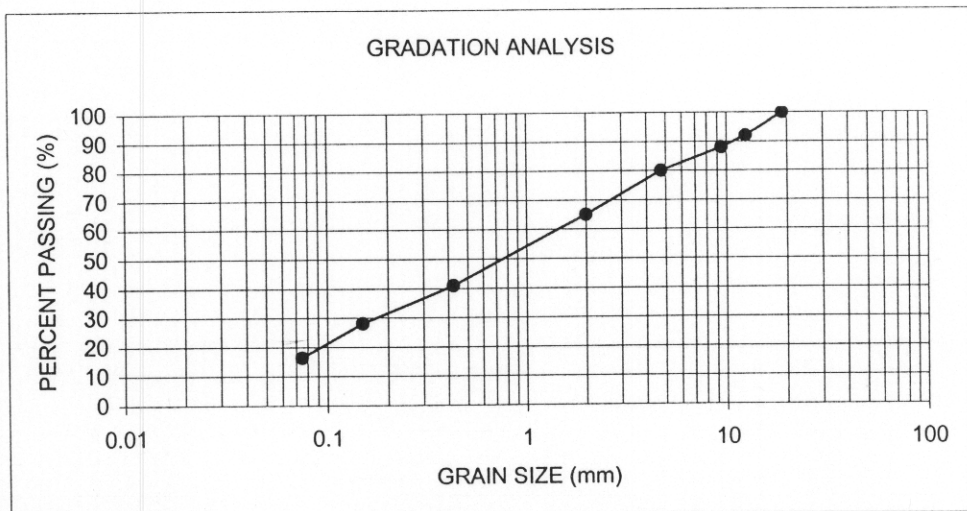
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

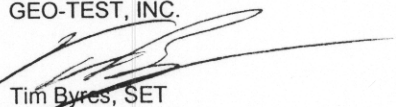
**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	92
3/8"	88
No. 4	80
No. 10	65
No. 40	41
No. 100	28
No. 200	16.3

Moisture Content (%): 2.0



Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

Addressee: (2)

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June 25, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 2 @ 27 1/2 '  
SAMPLE: Slightly Silty Sand (SM-SP)

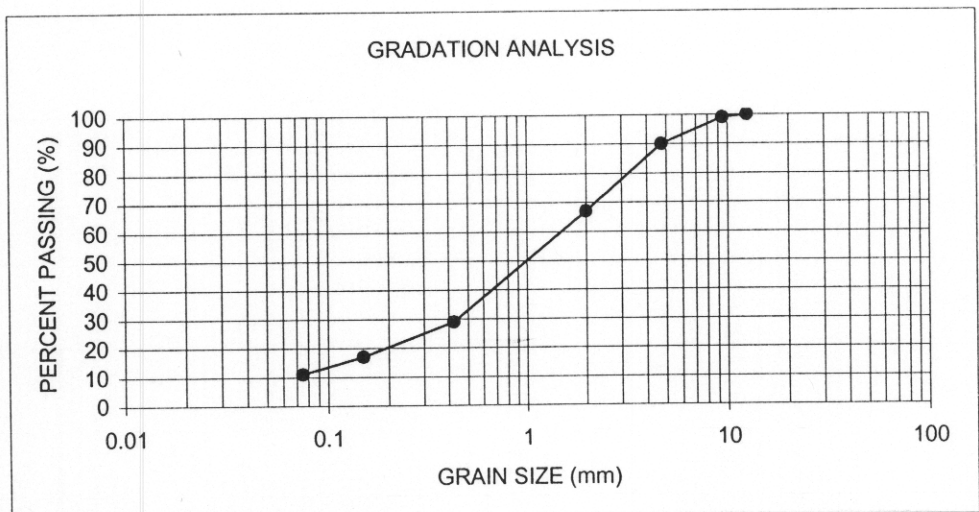
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	
1/2"	100
3/8"	99
No. 4	90
No. 10	67
No. 40	29
No. 100	17
No. 200	11.1

Moisture Content (%): 1.5



Respectfully Submitted:  
GEO-TEST, INC.

  
Tim Byres, SET

Addressee: (2)

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June 25, 2003

**GEO-TEST**

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 2 @ 30'

SAMPLE: Silty Sand (SM)

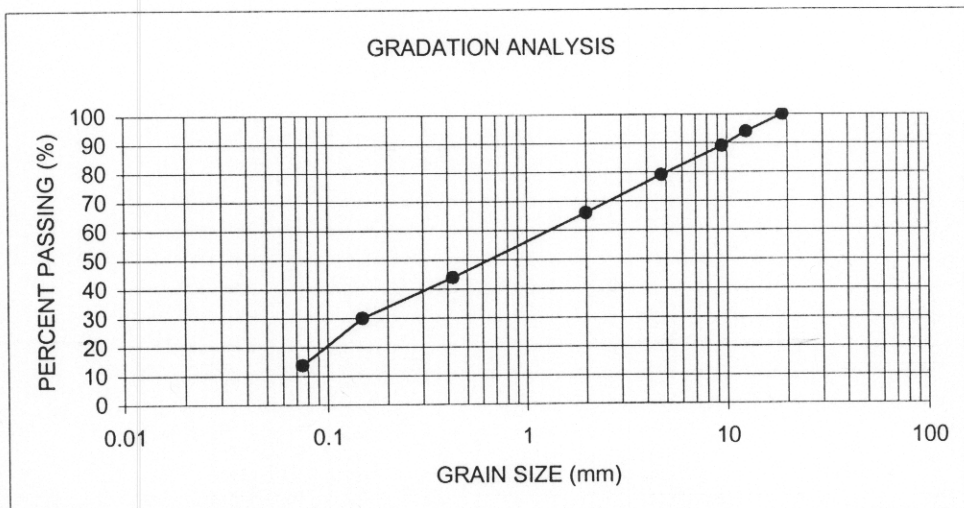
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	94
3/8"	89
No. 4	79
No. 10	66
No. 40	44
No. 100	30
No. 200	16.8

Moisture Content (%): 1.9



Respectfully Submitted:  
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June 25, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 3@ 2 1/2'

SAMPLE: Poorly Graded Sandy Gravel (GM-GP)

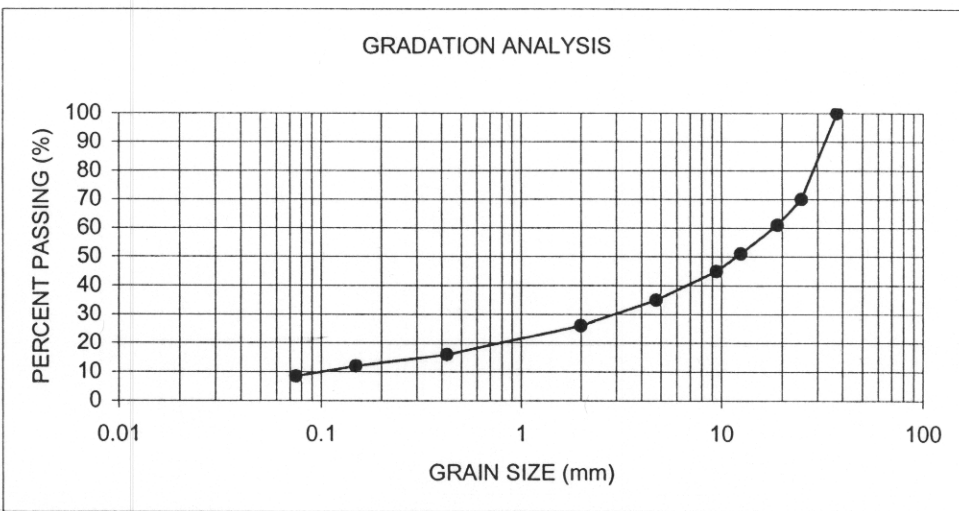
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	100
1"	70
3/4"	61
1/2"	51
3/8"	45
No. 4	35
No. 10	26
No. 40	16
No. 100	12
No. 200	8.4

Moisture Content (%): 0.8



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June 25, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 3@ 5'  
SAMPLE: Slightly Silty Sand (SM-SP)

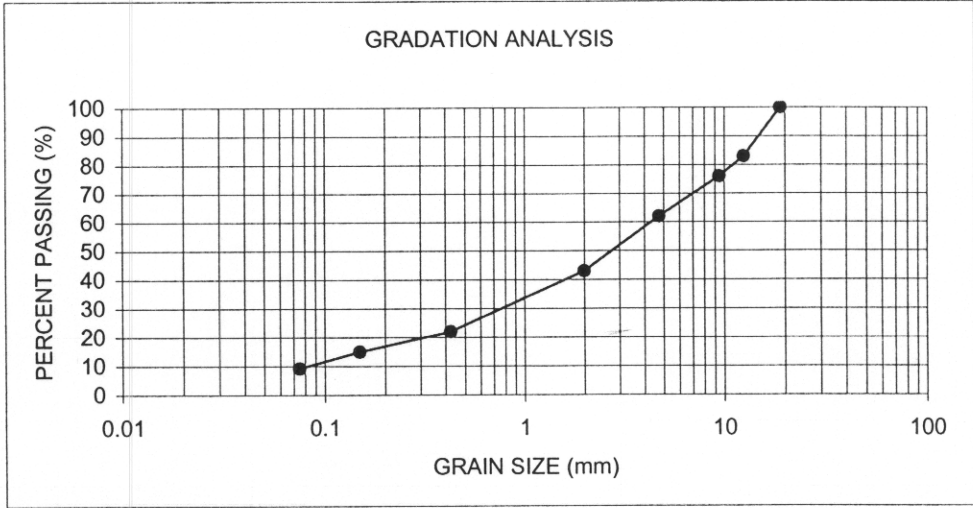
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit NV  
Plasticity Index: NP

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	83
3/8"	76
No. 4	62
No. 10	43
No. 40	22
No. 100	15
No. 200	9.2

Moisture Content (%): 0.8



Respectfully Submitted:  
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June 25, 2003

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB  
SAMPLE LOCATION: 3@ 7 1/2'  
SAMPLE: Clayey Sand (SC)

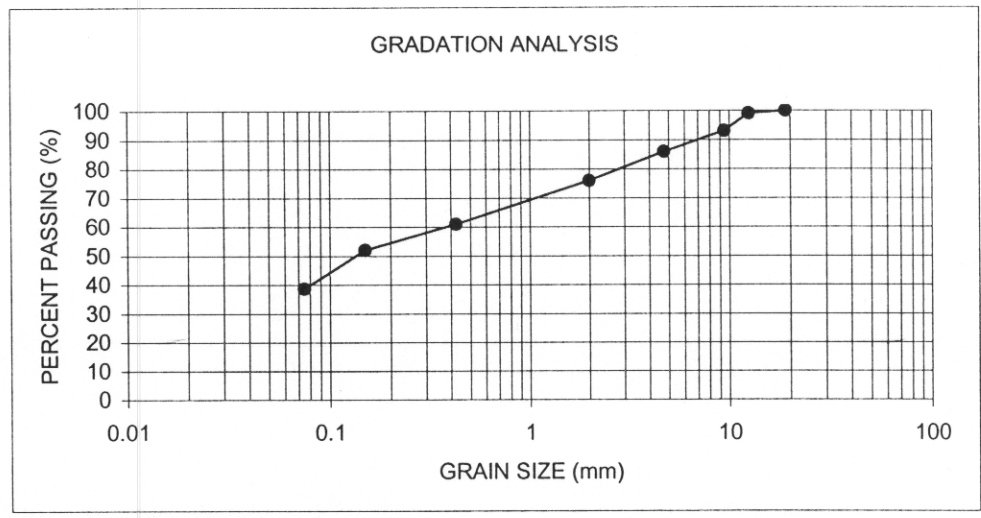
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 27  
Plasticity Index: 12

**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	99
3/8"	93
No. 4	86
No. 10	76
No. 40	61
No. 100	52
No. 200	38.7

Moisture Content (%): 7.8



Respectfully Submitted:  
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June 25, 2003

**GEO-TEST**

Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 3@ 10'

SAMPLE: Clayey Sand (SC)

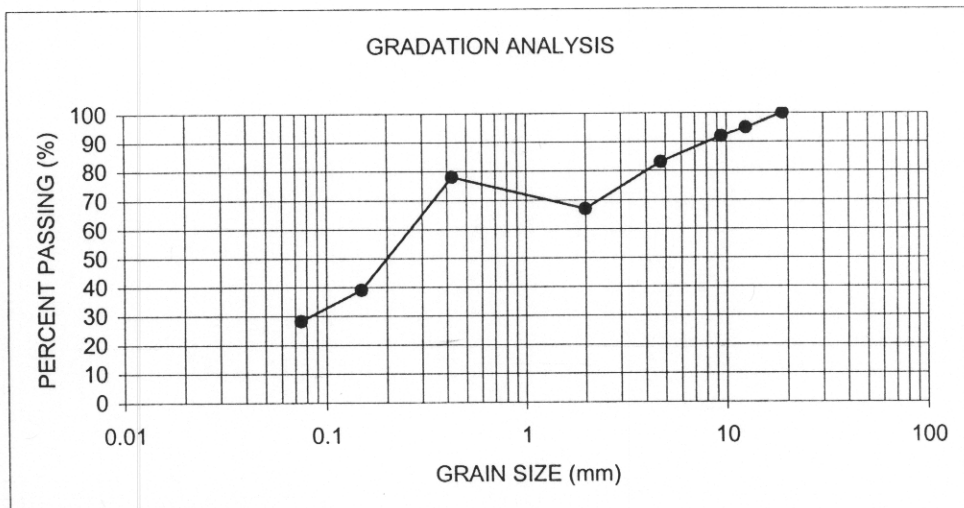
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 33  
Plasticity Index: 16

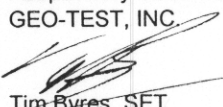
**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	95
3/8"	92
No. 4	83
No. 10	67
No. 40	48
No. 100	39
No. 200	28.3

Moisture Content (%): 5.9



Respectfully Submitted:  
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June 25, 2003



Department of the Army  
Albuquerque District Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109

Project No. 6-30501

PROJECT: Visiting Officer Quarters, Kirkland AFB

SAMPLE LOCATION: 3@ 15'

SAMPLE: Slightly Silty Sand (SM-SC)

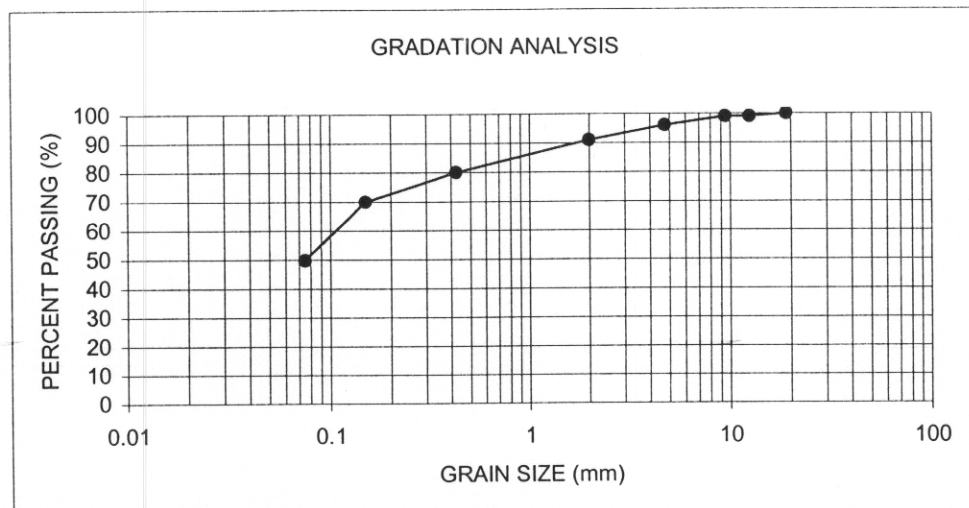
**ATTERBERG LIMITS (ASTM D-4318)**

Liquid Limit 20  
Plasticity Index: 7

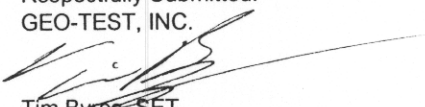
**SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)**

Sieve size	Percent Passing
1.5"	
1"	
3/4"	100
1/2"	99
3/8"	99
No. 4	96
No. 10	91
No. 40	80
No. 100	70
No. 200	49.8

Moisture Content (%): 8.6



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